

STATEMENT OF BASIS (AI No. 30100)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0122335 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Composite Mat Solutions, LLC
2900 Highway 93
Carencro, LA 70520

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Yvonne Baker

DATE PREPARED: October 31, 2006

1. PERMIT STATUS

A. Reason For Permit Action:

Issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. NPDES permit - NPDES permit effective date: N/A
NPDES permit expiration date: N/A
EPA has not retained enforcement authority.

C. LPDES permits - LAG530001
LPDES permit effective date: December 1, 2002
LPDES permit expiration date: November 30, 2007

D. Date Application Received: August 18, 2006

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - plastic mat manufacturing facility

Composite Mat Solutions, LLC is an existing facility which manufactures synthetic, interlocking plastic mats that provide the energy, construction and entertainment industries with safe access to sensitive environments. The mat systems provide a stable, environmentally safe and portable substrate for heavy equipment and construction activities in unstable soil conditions. The facility proposes to discharge treated sanitary wastewater through Outfall 001, cooling tower blowdown through Outfall 002, washrack wastewater through Outfall 003, and filter backwash through Outfall 004.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II as per LAC33:IX.1319 Table I and SIC 3079. In Appendix A - Section IV (Relation of 1987 to 1977 Industries) of the Standard Industrial Classification Manual, the SIC code 3089 is equivalent to a previous SIC code of 3079
3. Wastewater Type: III
4. SIC code: 3089

C. LOCATION - 2900 Highway 93 in Carencro, Lafayette Parish
Latitude 30° 18' 41", Longitude 92° 06' 58"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: treated sanitary wastewater
Treatment: STP with aeration, biological breakdown, settling and chlorination
Location: at the point of discharge from the STP prior to mixing with waters of the state
Flow: (70 employees X 35 GPD) = 2458 GPD
Discharge Route: via pipe to local drainage thence into Bayou Carencro

Outfall 002

Discharge Type: cooling tower blowdown
Treatment: none
Location: at the point of discharge from Building B prior to mixing with waters of the state
Flow: 3500 GPD
Discharge Route: via pipe to local drainage thence into Bayou Carencro

Outfall 003

Discharge Type: washrack wastewater
Treatment: none
Location: at the point of discharge from the washrack prior to mixing with waters of the state
Flow: 42 GPD
Discharge Route: via pipe to local drainage thence into Bayou Carencro

Outfall 004

Discharge Type: filter backwash
Treatment: none
Location: at the point of discharge from Building C prior to mixing with waters of the state
Flow: 966 GPD
Discharge Route: via pipe to local drainage thence into Bayou Carencro

4. RECEIVING WATERS

STREAM - via pipe to local drainage thence into Bayou Carencro

BASIN AND SEGMENT - Vermilion - Teche Basin, Segment 060801

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
f. agriculture

5. TMDL STATUS

Subsegment 060801, Vermilion River - Headwaters at Bayou Fusilier - Bourbeaux junction to New Flanders (Ambassador Caffery) Bridge, Hwy. 3073, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 060801 was previously listed as impaired for phosphorus, nitrogen (Nitrate + Nitrite as N), organic enrichment/low DO, pathogen indicators, suspended solids/turbidity/siltation, and carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060801:

To date, the following TMDLs have been completed: *Vermilion River Dissolved Oxygen and Nitrogen TMDL* (Federal Register Notice: Volume 66, Number 66, pages 18087-18089 (4/5/2001)), *Vermilion River Fecal Coliform TMDL* (Federal Register Notice: Volume 66, Number 66, pages 18087-18089 (4/5/2001)), *TMDL for TSS, Turbidity and Siltation for the 15 subsegments in the Vermilion River Basin* (Federal Register Notice: Volume 67, Number 85, pages 22080 - 22082 (5/2/2002)), *TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion Teche - River Basins* (Federal Register Notice: Volume 67, Number 55, pages 13144 - 13145 (3/21/02)).

As per the February 29, 2000 Delist (Federal Register Notice: Vol. 65, Num. 173, pages 54032-54034, 9/6/2000), assessment of new data and information shows this segment is meeting water quality standards for Phosphorus. Therefore, requirements for Total Phosphorus will not be placed in this permit.

Carbofuran is NOT among the effluent characteristics for discharges of treated sanitary wastewater, cooling tower blowdown, washrack wastewater and filter backwash; therefore the discharge should have no adverse impact on the existing uses of the receiving water body nor should it cause or contribute to the violation of state water quality standards.

Suspended solids/turbidity/siltation are among the effluent characteristics listed for discharges of treated sanitary wastewater, washrack washwater, and filter backwash however as per the EPA's *TMDL Siltation for the 15 Subsegments in the Vermilion River Basin*, point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required. The discharge for this facility should not cause or contribute to the violation of water quality standards for TSS in the receiving stream.

Organic enrichment/low DO and Nitrate + Nitrite (as N) are among the effluent characteristics for discharges of treated sanitary wastewater and washrack wastewater, however as per the EPA's *Vermilion River Dissolved Oxygen and Nitrogen TMDL*, the limits apply to sanitary discharges, and process outfalls of food processors and seafood processors. For discharges less than 25,000 GPD, secondary limits shall apply as per the TMDL. The organic enrichment/low DO and Nitrate + Nitrite (as N) impairments shall be addressed through the BOD5 parameter for Outfall 001. The discharge for this facility should not cause or contribute to the violation of water quality standards for organic enrichment/low DO in the receiving stream.

Pathogen Indicators are among the effluent characteristics for discharges of treated sanitary wastewater, however as per *The Vermilion River Fecal Coliform TMDL*, there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL. The pathogen indicators impairment shall be addressed through the fecal coliform parameters. The discharge for this facility should not cause or contribute to the violation of water quality standards for pathogen indicators in the receiving stream.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

7. COMPLIANCE HISTORY/COMMENTS

1. WQMD – An inspection on May 10, 2004 noted no areas of concern.
2. DMR Review/Excursions – No DMRs were on file at LDEQ for years 2004, 2005 or 2006.

8. EXISTING EFFLUENT LIMITS

Outfall 001 – treated sanitary wastewater

Effluent Characteristics	Discharge Limitations		Monitoring Requirements	
	Monthly Avg	Weekly Avg	Measurement Frequency	Sample Type
Flow (GPD)	---	Report	1/12 months	Estimate
BOD5	---	45 mg/L	1/12 months	Grab
TSS	---	45 mg/L	1/12 months	Grab
Oil & Grease	---	15 mg/L	1/12 months	Grab
Fecal Coliform Colonies/100 ml	---	400	1/12 months	Grab
pH	6.0 (minimum)	9.0 (maximum)	1/12 months	Grab

9. CHANGES FROM PREVIOUS PERMIT

Outfall 001:

The Oil and Grease limit was removed. The Measurement Frequency was changed to semiannually.

Outfall 002:

This outfall was added to the permit to encompass the cooling tower blowdown discharge.

Outfall 003:

This outfall was added to the permit to encompass the washrack wastewater discharge.

Outfall 004:

This outfall was added to the permit to encompass the filter backwash discharge.

10. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060801 of the Vermilion - Teche Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

11. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

12. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

13. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.
Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Rationale for Composite Mat Solutions, LLC

1. **Outfall 001** - treated sanitary wastewater (estimated flow is 2458 GPD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Weekly Avg (mg/L)	<u>Reference</u>
Flow (GPD)	---: Report	
BOD	---:45 mg/l	Similar discharges * (BPJ)
Fecal Coliform Colonies/100 ml	---:400 mg/l	Similar discharges * (BPJ)
TSS	---:45 mg/l	Similar discharges * (BPJ)
pH	6.0 - 9.0 su	Similar discharges * (BPJ)

Treatment: STP with aeration, biological breakdown, settling and chlorination

Monitoring Frequency: Semiannually for all parameters at the point of discharge from the STP prior to mixing with waters of the state.

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other facilities.

PHASE I INTERIM LIMITS

From the Permit Effective Date to 1 Year After the Permit Effective Date

2. **Outfall 002** – cooling tower blowdown (estimated flow is 3500 GPD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Daily Max (mg/L)	<u>Reference</u>
Flow (GPD)	Report: Report	
Temperature	---: Report	Similar discharges * (BPJ), LAG480000
Total Copper	Report: Report	BPJ
pH	6.0 - 9.0 su	Similar discharges * (BPJ), LAG480000

Treatment: none

Monitoring Frequency: monthly for all parameters at the point of discharge from Building B prior to mixing with waters of the state.

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other facilities and the Light Commercial General Permit, LAG480000 effective August 1, 2001. Report only requirements were established for Copper through BPJ. Per 1109.D.1, a compliance schedule may be given upon first-time issuance of water quality based limits. The facility will have 1 year to comply with the limits in Phase II.

PHASE II INTERIM LIMITS
From the 1 Year After the Permit Effective Date to the Permit Expiration Date

2. Outfall 002 – cooling tower blowdown (estimated flow is 3500 GPD)

<u>Pollutant</u>	<u>Limitation</u>	<u>Reference</u>
	Mo. Avg: Daily Max (mg/L)	
Flow (GPD)	Report: Report	
Temperature	---: Report	Similar discharges * (BPJ), LAG480000
Total Copper	50 µg/L: 118 µg/L	Water Quality Based Limits
pH	6.0 - 9.0 su	Similar discharges * (BPJ), LAG480000

Treatment: none

Monitoring Frequency: monthly for all parameters at the point of discharge from Building B prior to mixing with waters of the state.

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other facilities and the Light Commercial General Permit, LAG480000 effective August 1, 2001. Water Quality Limits were calculated for copper because the report levels for copper submitted with the application on August 18, 2006 and additional information submitted on October 26, 2006 were above the MQL.

3. Outfall 003 – washrack wastewater (estimated flow is 42 GPD)

<u>Pollutant</u>	<u>Limitation</u>	<u>Reference</u>
	Mo. Avg: Daily Max (mg/L)	
Flow (GPD)	Report: Report	
TSS	---:45 mg/L	Similar discharges * (BPJ), LAG480000
COD	200 mg/L: 300 mg/L	Similar discharges * (BPJ), LAG480000
Oil and Grease	---:15 mg/L	Similar discharges * (BPJ), LAG480000
pH	6.0 - 9.0 su	Similar discharges * (BPJ), LAG480000
Visible Sheen	---: No Presence	Similar discharges * (BPJ), LAG480000

Treatment: none

Monitoring Frequency: daily for visible sheen and quarterly for all other parameters at the point of discharge from the washrack prior to mixing with waters of the state.

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other facilities and the Light Commercial General Permit, LAG480000 effective August 1, 2001.

4. **Outfall 004** – filter backwash (estimated flow is 966 GPD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Daily Max (mg/L)	<u>Reference</u>
Flow (GPD)	Report:Report	
Total Recoverable Iron	---:Report	Similar discharges* (BPJ), LAG380000
Clarifying Agents Used	Report:Report	Similar discharges* (BPJ), LAG380000
TSS	30 mg/L:45 mg/L	Similar discharges* (BPJ), LAG380000
pH	6.0 - 9.0 su	Similar discharges* (BPJ), LAG380000

Treatment: none

Monitoring Frequency: Once per quarter for Total Recoverable Iron; once per month for Flow, Clarifying Agents, TSS and pH at the point of discharge from Building C prior to mixing with waters of the state.

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other facilities and the Potable Water Treatment Plant General Permit, LAG380000 effective January 1, 2005. A water quality screen was performed to calculate a water quality based limit for chlorides. However, the results of the screen indicate that a water quality based limit is not needed for chlorides. Therefore, a chlorides limit will not be included in the permit.

* Existing permits for similar outfalls
su Standard Units

EPA Guidelines for Plastics Molding and Forming (40 CFR Part 463) are not applicable because the facility does not have contact cooling and heating water, finishing water, or cleaning water that is subject to the guidelines.

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water shall not be required to obtain and LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 3089 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).